

Amendments to the Drawings:

The attached Replacement Sheet includes Fig. 1. No new matter has been added. Approval and entry are respectfully requested.

Attachment: 1 Replacement Sheet

REMARKS

I. Introduction

With the addition of new claim 13, claims 1 to 13 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

II. Information Disclosure Statement

Applicants thank the Examiner for considering the previously filed Information Disclosure Statement, PTO-1449 paper and cited reference(s).

III. Telephone Interview

Applicants note with appreciation the courtesies extended by Examiner Lau during the course of the telephone interview conducted on October 26, 2006 with Applicants' representatives, Clifford Ulrich (Reg. No. 42,194) and Michael Paul (Reg. No. 53,443).

During the course of the interview, no exhibit was shown, and no demonstration was conducted.

During the course of the interview, claim 1 was discussed.

During the course of the interview, U.S. Patent No. 6,418,396 ("Hagl") was discussed.

During the course of the interview, the claim features of a substantive nature discussed included a recitation in claim 1 of exclusively feeding scanning signals for generating correction data to a correction unit for at least one predefined time segment of finite length following each request of new scanning signals to be corrected, and a recitation in a proposed dependent claim that no new scanning signals are supplied to be corrected during the at least one time period.

During the course of the interview, the general thrust of the principal arguments of the Applicants included the lack of disclosure by Hagl of exclusively feeding scanning signals for generating correction data to a correction unit for at least one predefined time segment of finite length following each request of new scanning signals to be corrected, as well as the lack of disclosure by Hagl that no new scanning signals are supplied to be corrected during the at least one predefined time segment.

The general result of the interview was that it was generally agreed that Hagl does not appear to disclose that no new scanning signals are supplied to be corrected during the at least one predefined time period. However, no agreement was reached as to whether Hagl discloses exclusively feeding scanning signals for generating correction data to a correction unit for at least one predefined time segment of finite length following each request of new scanning signals to be corrected.

IV. Drawing Objections

As regards the objections to the drawings, the Examiner will note that Figure 1 has been amended herein to include legends for blocks 2, 11, 1, 5, 12, 3, 4 and 13. No new matter has been added. Entry and approval of the Replacement Sheet for Fig. 1 is respectfully requested.

V. Specification

With respect to the remarks on pages 3 to 4 of the Office Action pertaining to the arrangement of the Specification, these remarks are not understood to be an objection to the Specification. In this regard, the Office Action does not specifically indicate that the Specification is objected to. In addition, section headings are already provided in the Specification. Clarification is thus respectfully requested.

VI. Rejection of Claims 1 to 10 Under 35 U.S.C. § 101

As regards the rejection of claims 1 to 10 under 35 U.S.C. § 101, the Office Action has plainly failed to set forth a prima facie case, for which the Office bears the initial burden. In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992). Rather, the Office Action merely alleges that claims 1 to 10 “appear to merely describe signal and mathematical transformation and lack of concrete and tangible result.” As regards the Office Action’s contentions that “[t]he practical application of the claimed invention cannot be realized until the information determined is conveyed to a user” and that “[f]or the result to be tangible it would need to be output to a user or stored for later use,” Applicants respectfully request authority for these contentions.

Notwithstanding the foregoing, it is respectfully submitted that claims 1 to 10 plainly comply with 35 U.S.C. § 101. In this regard, claims 1 to 10 fall squarely within one of the four statutory categories, i.e., a process.

Furthermore, the present claims are not directed to nothing more than abstract ideas, natural phenomena or laws of nature. Rather, the present claims are directed to “[a] method for correcting position dependent scanning signals of an incremental position transducer.¹” In this regard, the claim 1, for example, recites “feeding the position dependent scanning signals of the incremental position transducer to a correction unit in response to a signal request. . . ; linking the position dependent scanning signals in the correction unit to correction data generated in accordance with active values of the scanning signals; and exclusively feeding scanning signals for generating correction data to the correction unit for at least one predefined time segment of finite length following each request of new scanning signals to be corrected” (emphasis added), which constitutes a sufficient transformation of an article to a different state or thing to end any inquiry into whether the present claims satisfy the requirements of 35 U.S.C. § 101.

In view of the foregoing, withdrawal of this rejection is respectfully requested.

VII. Rejection of Claims 1 to 3 and 6 to 12 Under 35 U.S.C. § 102(b)

Claims 1 to 3 and 6 to 12 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,418,396 (“Hagl”). Applicants respectfully submit that Hagl does not anticipate the present claims for at least the following reasons.

Claim 1 relates to a method for correcting position dependent scanning signals of an incremental position transducer for measuring positions, which includes a periodic scale structure scanned by a scanning unit, the position dependent scanning signals having deviations from ideal signals expected by a downstream evaluation unit, the method including feeding the position dependent scanning signals of the position transducer to a correction unit in response to a signal request, linking the position dependent scanning signals in the correction unit to correction data generated in accordance with active values of the scanning signals, and exclusively feeding scanning signals for generating correction data to the correction unit for at least one predefined time segment of finite length following each request of new scanning signals to be corrected.

It is respectfully submitted that Hagl does not disclose, or even suggest, a method or device for correcting position dependent scanning signals of an incremental position transducer for measuring positions for which a periodic scale structure is scanned by a scanning unit, the position dependent scanning signals having deviations from ideal signals expected by a downstream evaluation unit, as recited by the present claims. In particular, Hagl does not disclose the recited features of **exclusively** feeding scanning signals for generating correction data to the correction unit **for at least one predefined time segment of finite length** following each request of new scanning signals to be corrected. That is, Hagl does not disclose or suggest reserving a predefined time segment after each position request, in which scanning signals are exclusively fed to a correction unit to generate correction values for the scanning signals. Rather, Hagl describes a method to correct a potentially erroneous position measurement value after starting the measurement if the measurement is corrected at the time when a reference mark at a known position is passed the first time. At this point a differential position value is determined indicating how “wrong” the position was determined before. In the next sampling interval, this differential position value is transmitted together with the position code word to a subsequent electronics circuit, which can use the differential position value then in the course of further signal processing. Hence, an “exclusively feeding” of scanning signals during a predefined time segment, as recited in the present claims, is neither discussed or implied by Hagl.

The Office Action asserts on page 7 that Fig. 5, unit 50, col. 4, line 57 to col. 5, line 19, and col. 5, line 65 to col. 6, line 11 disclose these features but nowhere do these portions of Hagl disclose exclusively feeding the scanning signals to a correction unit during a predefined time segment for generating correction data in the correction unit. Instead, Hagl describes that an additional differential position value is transmitted together with a position code word after a reference mark with a defined position is passed the first time along the measurement path, which is clearly different from the presently claimed subject matter.

Thus, it is respectfully submitted that the Hagl does not anticipate the present claims for at least these reasons.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

VIII. New Claim 13

New claim 13 has been added herein. It is respectfully submitted that new claim 13 adds no new matter and is fully supported by the present application, including the Specification. It is respectfully submitted that claim 13 is patentable over Hagl for at least the reason that Hagl does not disclose that for each request of new scanning signals to be corrected a predefined time segment of finite length is reserved, during which a correction unit is available exclusively for an acquisition of new scanning signals in order to generate new correction data.

IX. Conclusion

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

By: 
Clifford A. Ulrich
Reg. No. 42,194

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KENYON & KENYON LLP
One Broadway
New York, New York 10004
(212) 425-5288
CUSTOMER NO. 26646